

In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) Method for identifying a communication interface of an electronic unit attached to a connector of an electronic device, comprising the steps of:

- generating a voltage pulse in said device on a pin of said connector;
- measuring the voltage response to the voltage pulse generated on said pin, as affected by a load in said unit;
- comparing the measured voltage response with predetermined voltage criteria; and
- performing communication interface identification of said unit dependent on said comparison.

2. (Original) The method as recited in claim 1, wherein said step of performing identification is preceded by the step of:

- selecting identification process dependent on the value of said measured voltage.

3. (Previously Presented) The method as recited in claim 1, wherein said step of performing identification is preceded by the step of:

- selecting identification process dependent on predetermined timing criteria.

4. (Currently Amended) The method as recited in claim 1, wherein said step of performing identification comprises the steps of:

- measuring dynamic behaviour of said voltage level as affected by the load in said unit;
- and
- allotting an identification address to said unit dependent on said dynamic behaviour.

5. (Original) The method as recited in claim 4, wherein said step of measuring dynamic behaviour comprises the steps of:

- measuring a time period during which said voltage holds a stable level; and
- measuring the value of said stable voltage level.

6. (Original) The method as recited in claim 5, wherein said identification address is determined by the length of said time period and the magnitude of said voltage level value.

7. (Previously Presented) The method as recited in claim 5, wherein said identification address comprises two nibbles, one address nibble being selected dependent on the length of said time period and one other nibble being selected dependent on the magnitude of said voltage level value.

8. (Original) The method as recited in claim 5, wherein said identification address is a two nibble hexadecimal number which is set dependent on predetermined time and voltage ranges.

9. (Original) The method as recited in claim 7, wherein a predetermined number is selected for said one address nibble if the length of said time period exceeds a predetermined maximum time period.

10. (Previously Presented) The method as recited in claim 2, further comprising the step of:

- monitoring a control bus of said connector for a predetermined time period, dependent on if said measured voltage level meets predetermined criteria for digital attachable units.

11. (Original) The method as recited in claim 10, wherein said predetermined criteria for digital attachable units is a maximum threshold voltage level.

12. (Previously Presented) The method as recited in claim 10, further comprising the step of:

- in the event of data communication being detected over said control bus during said time period, performing digital identification of said unit.

13. (Previously Presented) The method as recited in claim 10, further comprising the step of:

- in the event of no data communication being detected over said control bus during said time period, allotting an identification address comprising two nibbles to said unit, one address nibble for which a predetermined number is selected, and one other nibble for which a number is selected dependent on the magnitude of said voltage level value.

14. (Previously Presented) The method as recited in claim 1, further comprising the step of:

- repeatedly generating said voltage pulse with a predetermined repetition frequency.

15. (Previously Presented) The method as recited in claim 1, further comprising the steps of:

- repeatedly generating said voltage pulse with a predetermined repetition frequency characteristic; and
- adapting said repetition frequency to a mode of operation for said connector, by applying a first repetition frequency in an idle mode for said connector; and by applying a second repetition frequency, higher than said first repetition frequency, in an active mode for said connector, with an attached unit.

16. (Previously Presented) The method as recited in claim 1, wherein said step of performing identification includes the step of allotting the unit an identification address, and the method further comprises the step of:

- accessing a data memory using said identification address for retrieving operational data associated with said electronic unit.

17. (Original) The method as recited in claim 16, wherein said data memory is located in said electronic device.

18. (Original) The method as recited in claim 16, wherein said data memory is located in said electronic unit.

19. (Previously Presented) The method as recited in claim 16, further comprising the steps of:

- establishing a connection over a communication network for accessing said memory;
- and
- downloading operational data relating to said electronic unit to said electronic device.

20. (Previously Presented) The method as recited in claim 16, further comprising the step of:

- making adjustments dependent on the attached electronic unit to said electronic device, based on said operational data.

21. (Previously Presented) The method as recited Claim 1, wherein said electronic device is a radio communication terminal, and said electronic unit is an accessory which is attachable to said radio communication terminal.

22. (Previously Presented) The method as recited Claim 1, wherein said identity is representative of a class of electronic units.

23. (Previously Presented) The method as recited Claim 1, wherein said identity is unique for said electronic unit.

24. (Previously Presented) Computer program product, comprising computer program code stored in memory means, which is executable by means of a micro processor in an electronic device and that is configured to perform the steps according to Claim 1.

25. (Currently Amended) An identification system comprising:
an electronic unit having a communication interface comprising a first connector;
an electronic device comprising a system connector, wherein the first connector is configured to be attachable to the system connector, [[,]] wherein the electronic device comprises a voltage pulse generator connected to an identification pin of the system connector;
- a first pin of the first connector, is configured to be coupled to the identification pin upon attachment of the first connector to the system connector, and is coupled to an electronic circuit in the electronic unit;

- the electronic circuit has an electric load which is selected to represent an identity for said communication interface; and

- the electronic device comprises identification means for measuring a voltage response from the communication interface, comparing the measured voltage with predetermined voltage criteria, and performing communication interface identification of said unit dependent on said comparison, wherein the electric load is connected between said first pin and ground, and the identification means are connected to measure the voltage response on the identification pin.

26. (Previously Presented) The system as recited in claim 25, wherein said circuit comprises a resistive component, wherein said identity is dependent on the ohmic resistance of said resistive component.

27. (Previously Presented) The system as recited in claim 25, wherein said circuit comprises a capacitive component, wherein said identity is dependent on the dynamics of said circuit.

28. (Previously Presented) The system as recited in claim 26, wherein said circuit is configured to generate a dynamic load when subjected to a voltage from an attached electronic device, the load holds a substantially stable voltage level over said connector for a predetermined time period and then triggers said voltage to rise.

29. (Previously Presented) The system as recited in claim 28, wherein said identity is determined by the duration of said predetermined time period and said voltage level.

30. (Previously Presented) The system as recited in claim 25, wherein said electronic unit comprises a second connector to which said circuit is connected, and to which second connector an additional electronic unit electronic unit is configured to be cascably attached.

31. (Previously Presented) The system as recited in claim 25, wherein said electronic unit is an accessory which is attachable to an electronic device in the form of a radio communication terminal.

32. (Previously Presented) The system as recited in claim 25, wherein said identity is representative of a class of electronic units.

33. (Previously Presented) The system as recited in claim 25, wherein said identity is unique for said electronic unit.

34. (Previously Presented) An electronic circuit, for use in an electronic unit of a system as recited in claim 25, wherein said circuit is connected between one first connector pin and ground, and comprises an electric load configured to generate a dynamic voltage response on said first connector pin when subjected to a voltage pulse on said pin from an electronic device attached to the electronic unit, wherein the dynamic behaviour of the voltage response determined by the electric load is representative of the identity of a communication interface of said electronic unit.

35. (Previously Presented) The electronic circuit as recited in claim 34, wherein said circuit comprises a transistor, a resistive component, and an RC component, wherein said transistor controls current from the electronic device to the resistive component which initially generates a substantially stable voltage level for a predetermined time period and then said RC circuit triggers said voltage to rise.

36. (Previously Presented) The electronic circuit as recited in claim 35, wherein said time period is dependent on the characteristics of said transistor, and said transistor is contained on an ASIC.